

UNITED STATES DEPARTMENT OF AGRICULTURE,
BUREAU OF PLANT INDUSTRY,
OFFICE OF FOREIGN SEED AND PLANT INTRODUCTION.

NO. 70.

BULLETIN OF FOREIGN PLANT INTRODUCTIONS.

November 16 to 30, 1911.

NEW PLANT IMMIGRANTS.

(NOTE: Applications for material listed in this bulletin may be made at any time to this Office. As they are received they are filed, and when the material is ready for the use of experimenters it is sent to those on the list of applicants who can show that they are prepared to care for it, as well as to others selected because of their special fitness to experiment with the particular plants imported.

One of the main objects of the Office of Foreign Seed and Plant Introduction is to secure material for plant experimenters, and it will undertake as far as possible to fill any specific requests for foreign seeds or plants from plant breeders and others interested.)

GENERA REPRESENTED IN THIS NUMBER.

Benincasa.	32104.	Panicum.	32113,
Berberis.	32102.		32119-120.
Calamus.	32108.	Paspalum.	32116.
Castanospermum.	32087.	Passiflora.	32127.
Coffea.	32160-162.	Polytrias.	32111.
Dialium.	32126.	Pterocarpus.	32121.
Helianthus.	32155.	Rubus.	32101,
Impatiens.	32128-129.		32130-131.
Medicago.	32089.	Spondias.	32110.
Meibomia.	32114.	Syntherisma.	32117.
Myristica.	32124.	Triticum.	32156-157.

PLATE: Caravan of our Agricultural Explorer, Mr. Frank N. Meyer, in Chinese Turkestan.

BENINCASA CERIFERA. (Cucurbitaceae.) 32104. Seeds of wax gourd from Trichinopoli, India. Collected by Prof. C. V. Piper. "Large, cylindrical, twelve to eighteen inches long by six to eight inches in diameter. Very white and waxy fruit." (Piper.) This vegetable commonly used by the Chinese for vegetable soups, and also candied as a sweetmeat wherever it grows, is recommended to amateurs who are experimenting with new vegetables. It has been grown successfully near Washington. For distribution later.

BERBERIS SP. (Berberidaceae.) 32102. Seeds of a barberry from Nuwara Eliya, Ceylon. Collected by Prof. C. V. Piper. "A common species at an altitude of 6000 feet. It closely resembles *B. vulgaris*, but the fruits are black." (Piper.) For distribution later.

CALAMUS VIMINALIS. (Phoenicaceae.) 32108. Seeds of a rattan from Trichinopoli, India. Collected by Prof. C. V. Piper. "A peculiar fruit said to be used in curries. Flesh very acid." (Piper.) "It is a stout scrambling and climbing species, with cane thin, but strong. It makes excellent walking sticks, and is the chief rattan of the Malay Peninsula." (Watt, Commercial products of India.) For distribution later.

CASTANOSPERMUM AUSTRALE. (Fabaceae.) 32087. Seeds of the Moreton Bay chestnut from Brisbane, Queensland. Presented by Mr. Frederick Manson Bailey, Colonial Botanist. "In the scrub near Kuranda we noticed trees bearing pods about the size and shape of a banana, but at least twice the diameter. Upon opening the pods they were found to contain huge beans that look very much like chestnuts. They have a leathery skin and the interior is white and not very hard, about the consistency of a nut. I tasted one of the beans, although I was told that it was poisonous. It tasted very much like a nut, but had no distinctive flavor. In spite of the poisonous nature of the bean the 'black fellows' have learned to use it as food. They first roast the beans in hot ashes, then skin them and pound the white flesh into coarse flour. They fill a basket with this flour and place it in running water over night. In this way the poisonous principle is washed out." (Dr. Alexander Graham Bell, at whose suggestion these seeds were procured.) For distribution later.

COFFEA SPP. (Rubiaceae.) 32160-162. Seeds of coffee from Mayaguez, Porto Rico. Presented by Mr. D. W. May, Director, Agricultural Experiment Station. Three varieties of coffee from the Porto Rico Station's experimental breeding. For distribution later.

DIALIUM INDUM. (Caesalpiniaceae.) 32126. Seeds from Singapore. Collected by Prof. C. V. Piper. "Fruit like a tamarind in structure and flavor. Purchased in the market at Singapore." (Piper.) For distribution later.

HELIANTHUS ANNUUS. (Asteraceae.) 32155. Seeds of sunflower from Bezenshook, Samara Govt., Russia. "A variety of sunflower called 'Pantsernara' meaning armor plated, originated by Mr. Karsin in Russia. The seeds of this remarkable variety are provided with an extremely hard shell, being coated with silicic acid, and the weevils which have been playing such havoc heretofore with the sunflower seed crop in Russia, find it beyond their powers to penetrate the hulls of this variety. Obtained from Prof. N. M. Tulaikoff, Director of the Agricultural Experiment Station at Bezenshook." (Meyer's introduction.) For distribution later.

IMPATIENS SPP. (Impatiensaceae.) 32128-129. Seeds from Peradeniya, Ceylon, and Garoet, Java, respectively. Collected by Prof. C. V. Piper. Seeds of two rose-colored species of possible ornamental value for very moist frost-free regions. For distribution later.

MEDICAGO SATIVA VARIA. (Fabaceae.) 32089. Seeds from Isère, France. Presented by Dr. L. Trabut, Algiers. Procured at the request of this Office for the collection of Medicagos now being formed for breeding work of the Office of Forage Crop Investigations. For distribution later.

MEIBOMIA SP. (Fabaceae.) 32114. Seeds from Peradeniya, Ceylon. Collected by Prof. C. V. Piper. "Similar to, but much larger than *M. triflora*, now abundantly established in Florida. If this proves equally aggressive it will be a valuable pasture plant." (Piper.) For distribution later.

MYRISTICA SP. (Myristicaceae.) 32124. Seeds from Batavia, Java. Collected by Prof. C. V. Piper. "A seed used by the Javanese as a cheap substitute for nutmeg. Identified by Mr. H. J. Wigman." (Piper.) For distribution later.

PANICUM SPP. (Poaceae.) 32113, 32119-120. Seeds from Karanganjar, Java, Singalong Experiment Station, Philippine Islands, and Peradeniya, Ceylon, respectively. Collected by Prof. C. V. Piper. Three species; one Para grass for comparative test, the others, creeping and decumbent species, one of which forms a good but thin turf. For distribution later.

PASPALUM MARGINATUM. (Poaceae.) 32116. Seeds from Buitenzorg, Java. "The best lawn grass at Buitenzorg and will grow in dense shade." (Piper.) For distribution later.

PASSIFLORA SP. (Passifloraceae.) 32127. Seeds of a passion fruit from Singapore. "Fruit yellow, ovoid, two inches long. Pulp subacid, seedy. Bought in the market at Singapore." (Piper.) For distribution later.

POLYTRIAS AMAURA. (Poaceae.) 32111. Seeds from Batavia, Java. "The common lawn and pasture grass of Java at low altitudes. Makes a good lawn. Horses as well as cattle eat it readily and seem to thrive upon it. Introduced in the Philippines where it is spreading." (Piper.) For distribution later.

PTEROCARPUS SP. (Fabaceae.) 32121. Seeds from Singapore. "A beautiful shade tree. Elm-like in form, but with drooping branches. Abundantly planted in the Malay Peninsula, but according to Mr. Ridley, not native. Said to differ from the true *P. indicus* in having larger pods." (Piper.) For distribution later.

RUBUS SPP. (Rosaceae.) 32101, 32130-131. Seeds of raspberries from Nuwara Eliya, Ceylon, and Garoet, Java, respectively. Three species, the first pink-flowered with red tomentose fruits of good flavor, the others salmon yellow, and red, sub-acid, and of fair quality. For distribution later.

SPONDIAS SP. (Anacardiaceae.) 32110. Seeds of the we fruit from Colombo, Ceylon. "Fruit smooth, oval, the size of a large hen's egg, each containing one stone. Flesh firm, yellowish, subacid, pleasant to taste, odor of pineapple. Bought in the market at Colombo." (Piper.) For distribution later.

SYNTHESISMA SP. (Poaceae.) 32117. Seeds from Batavia, Java. "A lawn grass much like *St. Augustine*, but hardly as good. Collected in shady ground." (Piper.) For distribution later.

TRITICUM DURUM. (Poaceae.) 32156-157. Seeds of durum wheat from Bezenshook, Samara Govt., Russia. "A large-grained uncommon summer variety of durum wheat, apparently originating in these regions," and "a new and valuable winter variety of black-bearded durum wheat having very long open ears, and proving extremely hardy, having survived snowless winters, where other winter wheats were either killed out or severely injured." (Meyer's introductions.) For distribution later.

NOTES FROM FOREIGN CORRESPONDENTS.

ALGERIA. Algiers. Mr. Walter T. Swingle writes November 26 to Mr. W. A. Taylor, Assistant Chief, that Dr. Trabut, in charge of the Algerian Botanical Service, has offered to send us a complete collection of the more interesting native vines, including a seedling Ahmeur bou Ahmeur, the North African original of the Flame Tokay, that is of good quality without ceasing to be a good shipper! I have found a very interesting new persimmon of the South(?) Chinese type as distinguished from the Japanese type. It differs decidedly from the Kaki, has larger leaves, green fruit with an odor of jimson weed(!) when unripe. Both the common small fruited variety and a new variety with fruits measuring two and three quarters to three inches in diameter are considered superior in flavor to the red Japanese sorts. Dr. Trabut has the finest collection of citrus fruits I have ever seen, certainly far superior to anything in America. He has some twenty-five or thirty of the principal American sorts growing alongside the choicest Old World varieties. Algeria is destined to be THE orange region of the Old World - the Spanish and Italian growers will never equal the French in skill and alertness and especially in ability to fight disease. In some ways the Algerian growers are in advance of ours - not having the capital invested in old varieties as we have, they are much more ready to test new sorts, and Dr. Trabut has for ten years been collecting all the cultivated sorts from all the orange producing regions of the world. You can see in his garden the Satsuma and King from Florida; Unshiu and Kawakami from Japan; Dancy Tangerine, South African Naartjie, Clementine and Saigon No. 19 (these last two having long leaves unlike our tangerine and two months earlier, as early as the Satsuma in this climate) and a lot of other loose-skinned oranges in full bearing." In a letter of November 30 to Dr. B. T. Galloway he adds: "I was very much impressed by the value of the Clementine Tangerine which is by far the earliest of the kidglove type except the Satsuma. It is a bright red-orange medium-sized tangerine with a special flavor and aroma, not, however, so different from the ordinary tangerine as is the Satsuma. A tree sent to Florida three years ago and planted on the leased orchard at Glen St. Mary showed very marked resistance to cold - probably as much as the Satsuma. Dr. Trabut is convinced that it is a hybrid of a tangerine with pollen from the 'granito' a willow-leaved Spanish variety of sour-orange. I do not see any trace of sour orange in the Clementine, but I must admit that forms very like the 'granito' do appear among its descendants. Some of the specimens I am sending you show the punctures of the fruit-fly, Ceratitis(?). I fear this would make us a lot of

trouble if it got into America. It can live in persimmons and lots of other fruits, so it could spread into the woods around New York and gradually extend to the great fruit regions of the Eastern States."

In connection with the Ahmeur bou Ahmeur grape mentioned Mr. Taylor calls attention to the fact "that Mr. Husmann has fruited this variety in California for several seasons from stock obtained from Richter, Montpellier, France, some years ago. He is satisfied that it is distinct from Flame Tokay, though evidently of the same type."

Issued January 17, 1912.



AGRICULTURAL EXPLORER'S CARAVAN IN CHINESE TURKESTAN.

"Our large cart, with its three mules and a strong horse and over 1000 pounds of baggage in it trekking through a piece of sandy and alkaline desert. Sand dunes rise here and there above the intensely monotonous country and are mostly covered with reeds where it is swampy, or with tamarisk bushes where it is drier." From photograph by Mr. Frank N. Meyer, taken near Ure-dalik, Chinese Turkestan, February 13, 1911.

This outfit was used en route from Kashgar to Aksu, along the north border of the Takla-Makan desert. At Aksu the load was shifted to pack-horses for crossing the dangerous Mussart pass. The man in the foreground is the Russo-Turki interpreter, the other two being the driver and general helper.